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United States Department of Agriculture,

FEDERAL HORTICULTURAL BOARD.

C. L. MARLATT, *Chairman;* W. A. ORTON, GEO. B. SUDWORTH, W. D. HUNTER, KARL F. KELLERMAN; R. C. ALTHOUSE, *Secretary.*

SERVICE AND REGULATORY ANNOUNCEMENTS.

MAY, 1919.

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GENERAL NOTES.

THE PINK BOLLWORM.

The clean-up work on the Rio Grande and Pecos Rivers in western Texas was largely completed in April. Early in May the technical force was diverted in part to the work of tracing the Mexican cotton which came into the United States for some years prior to the embargo. The records indicate that this cotton amounted altogether to some 150,000 bales. Much of this cotton went immediately to northern mills or was exported, but some of it, aggregating several hundred bales, went to mills in the eastern portion of the cotton belt. Some work has already been done in relation to this cotton, but the whole subject is now being taken up in a much more thorough manner and all cotton that has entered the United States from Mexico since January, 1912, will be traced. Wherever such cotton was utilized in mills in cotton-growing districts, extensive scouting of the cotton grown in such districts will be made to determine the possibility of any infestation by the pink bollworm.

The main work of the summer, however, will be field surveys in Texas and adjoining States in which all possible avenues of distribution of the pink bollworm will be followed up. The extent and detail of this work is indicated by the following summary submitted by Dr. Hunter:

1. Inspection of the districts surrounding the original 12 mills which received Mexican cotton seed in 1916.
2. Inspection of a number of places which received hulls or other cottonseed products from the above mills.

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3. Inspection of fields about a large number of mills and other establishments which received cotton seed or cottonseed products from southeastern Texas just before infestation was discovered there.

4. Inspection of fields surrounding some 25 mills in the Southeastern States which received Mexican cotton prior to 1916. In many cases the motes from this cotton were used as fertilizers.

5. Inspection of the observation zone outside of noncotton zone No. 1 at Hearne.

6. Inspection of all of the cotton to be planted in what were noncotton zones Nos. 2 and 3 near Houston. There will be altogether probably 30,000 acres of this cotton, of which 15,000 will be in districts where more or less heavy infestation was found in 1917.

7. Inspection of volunteer cotton found in zone No. 4 near Eagle Pass.

8. Inspection of volunteer cotton found in zone No. 5, including the Big Bend.

9. Inspection of fields in the Pecos Valley, where infestation was found last winter, and in many fields down the river to which infestation may have been carried by floods.

10. Inspection of fields in the vicinities of mills at Ballinger, Abilene, and Winters, which received a portion of the Pecos Valley seed crop in the fall of 1918.

11. Inspection of fields growing in Arizona near Mexican frontier.

In addition to this work will be the general cooperation with the State of Texas in the enforcement of the restrictions in the noncotton and quarantined zones.

The border control is a continuing work. The new car fumigation houses have now been completed at all the ports of entry from El Paso to Brownsville, and as soon as funds are made available by Congress for the purchase of chemicals and employment of labor, the house fumigation will take the place of the old style car fumigation.

The research work in the Laguna is being actively prosecuted. It involves this year (1) a continuation of life-history studies of the insect; (2) the determination of the importance of alternative food plants, such as okra and possible native Mexican and Texas malvaceous plants related to cotton—a considerable quantity of seeds of these plants having been collected in Texas, and the plants now being grown in the Laguna for the purpose of this experiment; (3) determination of control possibilities by poisoning and by cultural methods; (4) determination of the amount of damage throughout the season, and (5) the determination of the extent of natural distribution and of the possibilities of distribution through the agency of irrigation canals.

The broad-scale survey work such as is necessary along the Rio Grande and in special districts, difficult of ordinary survey, will be continued with the aid of an aeroplane service in cooperation with the War Department.

EUROPEAN CORN BORER.

Three orders have been issued supplementing the original order of quarantine relating to the European corn borer referred to in the last number of these announcements adding additional cities and towns to the infested district. None of the reports of possible occurrence of the European corn borer outside of the known general areas infested in New York and Massachusetts have been confirmed.

THE FLAG SMUT AND TAKE-ALL SITUATION.

The promulgation of the proposed quarantine with respect to the flag smut and take-all diseases of wheat and other cereals is being postponed to determine the practicability of disinfecting wheat from the countries under consideration as a basis for determining the restrictions which should be placed upon the entry of such wheat. In the meantime both the flag smut and take-all diseases have been discovered in Illinois and the take-all disease in Indiana.

The source of entry of these diseases into this country has not been determined. To institute immediate action for the determination of distribution as a basis for control or possible eradication of these diseases, a meeting of plant pathologists from the Central and Eastern grain-growing States was held at St. Louis, Mo., May 12, under the auspices of the Plant Disease Survey and the Office of Cereal Investigations of this Department in cooperation with the Federal Horticultural Board. As a result of this conference a thoroughgoing survey of wheat fields is being undertaken in all the States involved. The results of this survey will probably be made the basis of a public hearing later in the summer to consider possible domestic quarantine action on account of these diseases.

THE GIPSY MOTH AND BROWN-TAIL MOTH QUARANTINE.

The gipsy moth and brown-tail moth quarantine, published in this issue of the Service and Regulatory Announcements, is the annual revision of this quarantine to embody the necessary changes as to the infested area which are required from time to time. In this instance the areas covered have been reduced in the case of the brown-tail moth by a territory approximately 5,100 square miles, and in the case of the gipsy moth by a territory approximating 1,757 square miles. The reduction in the case of the brown-tail moth was made possible by the large-scale clean-up operations on the outer edge of the infested territory, and in the case of the gipsy moth by the extensive winter killing of the eggs during the unusually severe winter of 1917–18.

REPORTS OF VIOLATIONS OF DOMESTIC WHITE PINE BLISTER RUST QUARANTINE.

During the month of May reports were received from the State inspection officials of the States of Montana and California of a number of shipments of currant and gooseberry plants from Eastern nurserymen to points in the two States named. The Federal Horticultural Board relies on the State inspectors to notify it of all such violations. All instances of this kind should be promptly brought to the attention of the board, together with full information in order that proper legal steps may be taken to prevent repetitions. In this connection attention is called to the chairman's letter of February 4, 1918, requesting the cooperation of the State inspectors in this respect. The letter referred to appears on pages 18 and 19 of the Service and Regulatory Announcements of the Board for February, 1918.

QUARANTINE ON ACCOUNT OF GIPSY MOTH AND BROWN-TAIL MOTH. NOTICE OF QUARANTINE NO. 33, WITH REGULATIONS (REVISED).

[Effective on and after July 1, 1919.]

GIPSY MOTH AND BROWN-TAIL MOTH.

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that two injurious insects—the gipsy moth (*Porthetria dispar*) and the brown-tail moth (*Euproctis chrysorrhoea*)—new to and not heretofore widely distributed within and throughout the United States, exists in parts of the following States, to wit: Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut.

Now, therefore, I, D. F. Houston, Secretary of Agriculture, under the authority conferred by section 8 of the plant quarantine act approved August 20, 1912 (37 Stat., 315), as amended by the act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), do hereby quarantine the towns and territory hereinafter described as infested by the brown-tail moth, and the towns and territory hereinafter described as infested by the gipsy moth, and by this notice of quarantine No. 33, revised, do order that (1) coniferous trees, such as spruce, fir, hemlock, pine, juniper (cedar), and arbor-vitae (white cedar), known and described as "Christmas trees," and parts thereof, and decorative

plants, such as holly and laurel, known and described as "Christmas greens or greenery"; (2) forest-plant products, including logs, tan bark, posts, poles, railroad ties, cordwood, and lumber; (3) field-grown florists' stock, trees, shrubs, vines, cuttings, and other plants and plant products for planting or propagation, excepting fruit pits, seeds of fruit and ornamental trees and shrubs, field, vegetable, and flower seeds, bedding plants, and other herbaceous plants and roots; and (4) stone or quarry products, shall not be moved or allowed to move interstate in manner or method or under conditions other than those prescribed in the rules and regulations hereinafter made and amendments thereto.

The following towns and all the territory between said towns and the Atlantic Ocean are quarantined for the brown tail moth, namely: Houlton, Ludlow, New Limerick, Oakfield, Dyer Brook, Crystal, Patten, Staceyville, II Range 7, I Range 7, Millinocket, Indian Township, A West Seboeis, III (immediately south of A West Seboeis), Lakeview, Milo, Sebec, Foxcroft, Dover, Dexter, Cambridge, Harmony, Hartland, Cornville, Madison, Anson, New Vineyard, Farmington, Wilton, Dixfield, Mexico, Rumford, Andover, Andover West Surplus, Grafton, Riley, Gilead, and Batchelders Grant, Me.; Chatham, Jackson, Bartlett, Albany, Waterville, Sandwich, Campton, Rumney, Dorchester, Canaan, Enfield, Grantham, Croydon, Newport, Goshen, Lempster, Washington, Stoddard, Sullivan, Keene, Marlboro, Troy, and Richmond, N. H.; Northfield, Warwick, Orange, Athol, Petersham, Barre, Hardwick, New Braintree, West Brookfield, Brookfield, and Sturbridge, Mass.; Union, Eastford, Chaplin, Scotland, Canterbury, Lisbon, Griswold, North Stonington, Ledyard, and Groton, Conn.

The following towns and all the territory between said towns and the Atlantic Ocean are quarantined for the gipsy moth, namely; Tremont, Southwest Harbor, Mount Desert, Eden, Lamoine, city of Ellsworth, Dedham, Bucksport, Orrington, Hampden, city of Bangor, Hermon, Levant, Kenduskeag, Corinth, Exeter, Corrina, St. Albans, Harmony, Hartland, Cornville, Madison, Anson, New Vineyard, Farmington, Wilton, Dixfield, Mexico, Rumford, Andover, Andover West Surplus, Grafton, Riley, Gilead, and Batchelders Grant, Me.; Chatham, Jackson, Bartlett, Albany, Waterville, Sandwich, Campton, Rumney, Dorchester, Canaan, Enfield, Grantham, Croydon, Newport, Goshen, Lempster, Washington, Stoddard, Sullivan, Keene, Marlboro, Troy, and Richmond, N. H.; Northfield, Warwick, Orange, Athol, Petersham, Barre, Hardwick, New Braintree, West Brookfield, Brookfield, and Sturbridge, Mass.; Union, Eastford, Chaplin, Scotland, Canterbury, Lisbon, Griswold, North Stonington, and Ledyard, Conn.; and Westerly, R. I.

For the purpose of inspection, the above designated towns and territory quarantined for the gipsy moth are divided into two areas, to be known as the lightly infested area and the generally infested area.

The following towns comprise the lightly infested area: Isle Au Haut, Swans Island, Tremont, Southwest Harbor, Mount Desert, Eden, Lamoine, Trenton, city of Ellsworth, Surry, Bluehill, Brooklin, Sedgwick, Deer Isle, Stonington, North Haven, Vinal Haven, Islesboro, Castine, Brooksville, Penobscott, Orland, Dedham, Orrington, Bucksport, Stockton Springs, Searsport, Prospect, Frankfort, Winterport, Hampden, Hermon, city of Bangor, Kenduskeag, Corinth, Levant, Carmel, Newburgh, Monroe, Brooks, Swanville, Waldo, city of Belfast, Northport, Lincolnville, Camden, Hope, Appleton, Searsmont, Belmont, Morrill, Montville, Knox, Thorndike, Jackson, Dixmont, Etna, Stetson, Exeter, Corrina, Newport, Plymouth, Troy, St. Albans, Palmyra, Detroit, Burnham, Unity, Freedom, Liberty, Washington, Somerville, Palermo, Albion, Benton, Clinton, Canaan, Pittsfield, Hartland, Harmony, Cornville, Skowhegan, China, Windsor, Vassalboro, Winslow, Waterville, Madison, Norridgewock, Smithfield, Fairfield, Oakland, Sidney, Anson, Stark, Mercer, Rome, Belgrade, Manchester, Winthrop, Readfield, Mount Vernon, Vienna, New Sharon, Industry, New Vineyard, Farmington, Chesterville, Fayette, Wayne, Monmouth, Wilton, Jay, Livermore, East Livermore, Leeds, Greene, Dixfield, Canton, Hartford, Turner, Mexico, Peru, Sumner, Buckfield, Hebron, Oxford, Otisfield, Harrison, Waterford, Norway, Paris, Woodstock, Greenwood, Albany, Bethel, Milton, Franklin, Rumford, Andover, Andover West Surplus, Newry, Grafton, Riley, Gilead, Fryeburg, Academy Grant, Mason, Stoneham, Lovell, Sweden, Fryeburg, Stow, and Batchelders Grant, Me.; Chatham, Jackson, Bartlett, Conway, Eaton, Madison, Tamworth, Albany, Waterville, Sandwich, Campton, Rumney, Plymouth, Bridgewater, Hebron, Groton, Dorchester, Canaan, Orange, Alexandria, Danbury, Grafton, Enfield, Grantham, Springfield, Wilmot, New London, Sun-

apee, Croydon, Newport, Goshen, Newbury, Bradford, Washington, Lempster, Hillsborough, Windsor, Stoddard, Antrim, Hancock, Nelson, Sullivan, Keene, Roxbury, Harrisville, Dublin, Marlboro, Troy, Jaffrey, Fitzwilliam, and Richmond, N. H.; Northfield, Warwick, Royalston, Orange, Athol, Phillipston, Templeton, Hubbardston, Petersham, Barre, Hardwick, New Braintree, Oakham, Rutland, Paxton, Leicester, Spencer, North Brookfield, West Brookfield, Brookfield, Sturbridge, Charlton, Southbridge, and Dudley, Mass.; Union, Woodstock, Eastford, Pomfret, Brooklyn, Hampton, Chaplin, Scotland, Canterbury, Lisbon, Griswold, Voluntown, Ledyard, and North Stonington, Conn.; Hopkinton, Westerly, Richmond, Charlestown, South Kingstown, Narragansett, and New Shoreham, R. I.

Other towns shall be classed as the generally infested area.

REGULATIONS.

REGULATION 1.—*Regulation of movement of plants and plant products and stone or quarry products under quarantine originating in the gipsy moth territory.*

(1) Coniferous trees, such as spruce, fir, hemlock, pine, juniper (cedar), and arbor vitæ (white cedar), known and described as "Christmas trees," and parts thereof, and decorative plants, such as holly and laurel, known and described as "Christmas greens or greenery"; (2) forest-plant products, including logs, tanbark, posts, poles, railroad ties, cordwood, and lumber; (3) field-grown florists' stock, trees, shrubs, vines, cuttings, and other plants and plant products for planting or propagation, excepting fruit pits, seeds of fruit and ornamental trees and shrubs, field, vegetable, and flower seeds, bedding plants, and other herbaceous plants and roots; and (4) stone or quarry products, shall not be moved or allowed to move interstate to any point outside the towns and territory quarantined for the gipsy moth, or from points in the generally infested area to points in the lightly infested area, unless and until such plants and plant products and stone or quarry products have been inspected by the United States Department of Agriculture and certified to be free from the gipsy moth and the brown-tail moth; but such plants and plant products and stone or quarry products may be moved interstate without restrictions, other than the requirements made by regulation 6 hereof, and such restrictions as may be imposed by State officials between all points within the lightly infested area, between points in said area, and points in the generally infested area, and between all points within the generally infested area.

REGULATION 2.—*Regulation of movement of plants and plant products under quarantine originating in the brown-tail moth territory.*[1]

Deciduous trees and shrubs or such parts thereof as bear leaves, including all deciduous field-grown florists' stock, vines, cuttings, grafts, and scions, but excepting forest-plant products, such as logs, tanbark, posts, poles, railroad ties, cordwood, and lumber, shall not be moved or allowed to move interstate to points outside the towns and territory quarantined for the brown-tail moth, unless and until such plants and plant products have been inspected by the United States Department of Agriculture and certified to be free from the brown-tail moth.

The interstate movement of all classes of plants and plant products entirely within the towns and territory quarantined for the brown-tail moth only will be permitted without restrictions, other than the requirements made by regulation 6 hereof, and such restrictions as may be imposed by State officials.

REGULATION 3.—*Inspection, certification, and marking a condition of interstate transportation.*

Every car, box, bale, or other container of plants and plant products and stone or quarry products of which inspection is required by these regulations shall be plainly marked with the name and address of the consignor and the name and address of the consignee, and shall bear a certificate showing that

[1] This regulation applies only to the quarantined territory for the brown-tail moth lying beyond or outside of the territory quarantined for the gipsy moth, because all shipments from territory common to the gipsy moth and the brown-tail moth are governed by the conditions of regulation 1. Coniferous trees and other evergreen trees are not covered by the brown-tail moth regulations.

the contents have been inspected by the United States Department of Agriculture and found to be free from moth infestation.

The inspection certificates in the case of carload and other bulk shipments shall accompany the waybills, conductors' manifests, memoranda, or bills of lading pertaining to such shipments.

Certificates of inspection will issue only for plants and plant products and stone or quarry products which have been actually inspected by the United States Department of Agriculture, and the use of such certificates in connection with plants and plant products and stone or quarry products which have not been so inspected is prohibited.

REGULATION 4.—*Conditions under which plants and plant products and stone or quarry products originating outside of the quarantined territory may be shipped from points within the quarantined territory.*

Plants and plant products and stone or quarry products of which the interstate movement is restricted by these regulations and which originate outside the towns and territory quarantined for the gipsy moth or the brown-tail moth may be shipped interstate from points within the quarantined towns and territory to points outside the quarantined towns and territory under permit from the Secretary of Agriculture. Permits will issue only for plants and plant products and stone or quarry products which are not infested with the gipsy moth or brown-tail moth, and transportation companies shall not accept or move interstate from within the quarantined towns and territory such plants and plant products and stone or quarry products originating outside the quarantined towns and territory unless each shipment is accompanied by a permit issued by the United States Department of Agriculture, 6 Beacon Street, Boston, Mass.

REGULATION 5.—*Conditions governing inspection and issuance of permits.*

Persons intending to move or allow to be moved interstate plants and plant products and stone or quarry products for which certificates of inspection or permits are required by these regulations will make application therefor as far as possible in advance of the probable date of shipment. Applications should show the nature and quantity of the plants or plant products and stone or quarry products it is proposed to move, together with their exact location and, if practicable, the contemplated date of shipment. Applicants for inspection will be required to assemble the articles to be inspected at the shipping point, and to so place them that they can be readily examined. If not so placed, inspection will be refused. Articles to be inspected must be free from ice and snow and in condition to make inspection easily practicable. All charges for storage, cartage, and labor incident to inspection other than the services of the inspectors shall be paid by the shipper.

REGULATION 6.—*Thorough cleaning required of cars, boats, and other vehicles before moving interstate.*

Cars, boats, and other vehicles which have been used in transporting within the quarantined area under the provisions of regulations 1 and 2, which provide for such movement without inspection and certification plants and plant products and stone or quarry products covered by these regulations, or any other article which may hereafter be made subject thereto, shall not be moved or allowed to move interstate unless the same shall have been thoroughly swept out and cleaned by the carrier at the point of unloading or destination of all litter and rubbish from such regulated articles. No litter, rubbish, or refuse from any such plants and plant products and stone or quarry products or other article shall be moved or allowed to move interstate.

This notice of quarantine amends and supersedes Notice of Quarantine No. 33, promulgated May 20, 1918, and shall be effective until otherwise ordered.

Done in the District of Columbia this 19th day of May, 1919.

Witness my hand and the seal of the United States Department of Agriculture.

[SEAL.] D. F. HOUSTON,
Secretary of Agriculture.

(T. D. 38023.)

PLANT QUARANTINE.

ATTENTION OF CUSTOMS OFFICERS CALLED TO THE PROHIBITION AGAINST THE IMPORTATION OF PLANTS THROUGH THE MAILS.

TREASURY DEPARTMENT, *May 19, 1919.*

To collectors and other officers of the customs:

The attention of the department has been called to the fact that an importation of plants by mail from Ireland, containing, among other things, some five-leafed pines, which are prohibited entry by quarantine on account of a dangerous disease known as the white-pine blister rust, was made and delivered to the importer through the post office at Boston, Mass.

The importation of plants through the mails is in violation of the order issued by the Post Office Department on May 27, 1913, as amended December 16, 1913, which prohibits the importation by mail of all growing or living plants, seeds, or other plant products for propagation, except field, vegetable, and flower seeds, unless ordered by or intended for and addressed to the United States Department of Agriculture, Washington, D. C.

At the request of the Department of Agriculture your attention is directed to the regulations above cited, and you are instructed to exercise proper care and diligence to carry out the provisions of the regulations mentioned and prevent the importation into this country of the plants, etc., included therein.

L. S. ROWE, *Assistant Secretary.*

RESTRICTIONS ON MAILING OF BARBERRY PLANT AND ITS HORTICULTURAL VARIETIES.

Quarantine Order No. 38, effective on and after May 1, 1919, issued by the Secretary of Agriculture, under authority of the plant quarantine act, quarantining the States of Alabama, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Mississippi, Missouri, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and the District of Columbia, on account of the common barberry (*Berberis vulgaris*) and its horticultural varieties, as well as other species of Berberis and Mahonia, capable of harboring the black stem rust of wheat, oats, barely, rye, and many wild and cultivated grasses, prohibits the movement from the quarantined areas of plants of the species referred to, namely:

Berberis aethensis, B. altaica, B. amurensis, B. aristata, B. asiatica, B. atropurpurea, B. brachcybotrys, B. brevipaniculata, B. buxifolia, B. canadensis, B. caroliniana (carolina), B. coriaria, B. cretica, B. declinatum, B. fendleri, B. fischeri, B. fremontii, B. heteropoda, B. ilicifolia, B. integerrima, B. laciflora, B. lycium, B. marcrophylla, B. neapalensis, B. neubertii, B. siberica, B sieboldii, B. sinensis, B. trifoliolata, B. umbellata, B. vulgaris including its subspecies and horticultural varieties, *Mahonia aquifolium, M. diversifolia, M. glauca,* and *M. repens.*

Under the provisions of paragraph 1, section 478, P. L. and R., acceptance for mailing of the plants named is subject to the restrictions of the order above mentioned and postmasters in areas quarantined by the order shall not, therefore, accept any of the plants named for mailing to points outside of such areas.

The quarantine order does not apply to the movement by the United States Department of Agriculture of the plants named for experimental or scientific purposes.—(Reprinted from the May, 1919, supplement to the Official Postal Guide.)

LIST OF CURRENT QUARANTINE AND OTHER RESTRICTIVE ORDERS.

QUARANTINE ORDERS.

The numbers assigned to these quarantines indicate merely the chronological order of issuance of both domestic and foreign quarantines in one numerical series. The quarantine numbers missing in this list are quarantines which have either been superseded or revoked. For convenience of reference these quarantines are here classified as domestic and foreign.

DOMESTIC QUARANTINES.

Date palms.—Quarantine No. 6: Regulates the interstate movement of date palms or date-palm offshooots from Riverside County, Calif., east of the San Bernardino meridian; Imperial County, Calif.; Yuma, Maricopa, and Pinal Counties, Ariz.; and Webb County, Tex.; on account of the Parlatoria scale (*Parlatoria blanchardi*) and the Phoenicococcus scale (*Phoenicococcus marlatti*).

Cotton seed and cottonseed hulls.—Quarantine No. 9: Prohibits the importation of cotton seed and cottonseed hulls from the Territory of Hawaii on account of the pink bollworm.

Hawaiian fruits.—Quarantine No. 13, revised: Prohibits or regulates the importation from Hawaii of all fruits and vegetables, in the natural or raw state, on account of the Mediterranean fruit fly and the melon fly.

Sugar cane.—Quarantine No. 16: Prohibits the importation from Hawaii and Porto Rico of living canes of sugar cane, or cuttings or parts thereof, on account of certain injurious insects and fungous diseases.

Cotton.—Quarantine No. 23, revised: Regulates the movement of cotton from Hawaii to the continental United States, on account of the pink bollworm.

Five-leafed pines, Ribes and Grossularia.—Quarantine No. 26, as amended: Prohibits the interstate movement of five-leafed pines, currant and gooseberry plants from all States east of and including the States of Minnesota, Iowa, Missouri, Arkansas, and Louisiana to points outside of this area; prohibits, further, (1) the interstate movement of five-leafed pines and black-currant plants to points outside the area comprising the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York, and (2) to protect the State of New York, the movement from the New England States, on account of the white-pine blister rust.

Sweet potato and yam.—Quarantine No. 30; Prohibits the movement from the Territories of Hawaii and Porto Rico into or through any other Territory, State, or District of the United States of all varieties of sweet potatoes and yams (*Ipomoea batatas* and *Dioscorea* spp.), regardless of the use for which the same are intended, on account of the sweet-potato weevil (*Cylas formicarius*) and the sweet-potato scarabee (*Euscepes batatæ*).

Banana plants.—Quarantine No. 32: Prohibits the movement from the Territories of Hawaii and Porto Rico into or through any other Territory, State, or District of the United States of any species or variety of banana plants (*Musa* spp.), regardless of the use for which the same are intended, on account of two injurious weevils, *Rhabdocnemis obscurus* and *Metamasius hemipterus*.

Gipsy moth and brown-tail moth.—Quarantine No. 33: Regulates the movement interstate to any point outside of the quarantined towns and territory, or from points in the generally infested area to points in the lightly infested area, of stone or quarry products, and of the plants and the plant products listed therein. The quarantine covers portions of the New England States.

Japanese beetle.—Quarantine No. 35: Regulates the movement interstate to any point outside the townships of Delran, Chester, and Cinnaminson, Burlington County, N. J., of green corn, commonly called sweet or sugar corn, on account of the Japanese beetle (*Popillia japonica*).

European corn borer.—Quarantine No. 36: Prohibits the movement interstate to any point outside of the quarantined area of corn fodder or cornstalks

whether used for packing or otherwise, green sweet corn, roasting ears, corn on the cob, and corn cobs, on account of the European corn borer (*Pyrausta nubilalis*).

Black stem rust.—Quarantine No. 38: Prohibits the movement interstate to any point outside of the quarantined area of the common barberry and its horticultural varieties, as well as certain other species of Berberis and Mahonia, on account of the black stem rust of wheat, oats, barley, rye, and many wild and cultivated grasses.

FOREIGN QUARANTINES.

Irish potato.—Quarantine No. 3: Prohibits the importation of the common or Irish potato from Newfoundland; the islands of St. Pierre and Miquelon; Great Britain, including England, Scotland, Wales, and Ireland; Germany; and Austria-Hungary, on account of the disease known as potato wart.

Mexican fruits.—Quarantine No. 5, as amended: Prohibits the importation of oranges, sweet limes, grapefruit, mangoes, achras sapotes, peaches, guavas, and plums from the Republic of Mexico, on account of the Mexican fruit fly.

Five-leafed pines, Ribes, and Grossularia.—Quarantine No. 7, as amended: Prohibits the importation from each and every country of Europe and Asia, and from the Dominion of Canada and Newfoundland, of all five-leafed pines and all species and varieties of the genera *Ribes* and *Grossularia*, on account of the white-pine blister rust.

Cotton seed and cottonseed hulls.—Quarantine No. 8, as amended: Prohibits the importation from any foreign locality and country, excepting only the locality of the Imperial Valley, in the State of Lower California, Mexico, of cotton seed (including seed cotton) of all species and varieties, and cottonseed hulls, on account of the pink bollworm. Cotton and cotton seed from the Imperial Valley may be entered under permit and regulation.

Seeds of avocado or alligator pear.—Quarantine No. 12: Prohibits the importation from Mexico and the countries of Central America of the seeds of the avocado or alligator pear, on account of the avocado weevil.

Sugar cane.—Quarantine No. 15: Prohibits the importation from all foreign countries of living canes of sugar cane, or cuttings or parts thereof, on account of certain injurious insects and fungous diseases. There are no restrictions on the entry of such materials into Hawaii and Porto Rico.

Citrus nursery stock.—Quarantine No. 19: Prohibits the importation from all foreign localities and countries of all citrus nursery stock, including buds, scions, and seeds, on account of the citrus canker and other dangerous citrus diseases. The term "citrus," as used in this quarantine, includes all plants belonging to the subfamily or tribe *Citratœ*.

European pines.—Quarantine No. 20: Prohibits, on account of the European pineshoot moth (*Evetria buoliana*), the importation from all European countries and localities of all pines not already excluded by Quarantine No. 7.

Indian corn or maize and related plants.—Quarantine No. 24, as amended: Prohibits the importation from southeastern Asia (including India, Siam, Indo-China, and China), Malayan Archipelago, Australia, New Zealand, Oceania, Philippine Islands, Formosa, Japan, and adjacent islands, in the raw or unmanufactured state, of seed and all other portions of Indian corn or maize (*Zea mays* L.), and the closely related plants, including all species of Teosinte (*Euchlaena*), Job's tears (*Coix*), *Polytoca*, *Chionachne*, and *Sclerachne*, on account of the downy mildews and *Physoderma* diseases of Indian corn, except that Indian corn or maize may be imported on compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

Citrus fruit.—Quarantine No. 28: Prohibits the importation from eastern and southeastern Asia (including India, Siam, Indo-China, and China), the Malayan Archipelago, the Philippine Islands, Oceania (except Australia, Tasmania, and New Zealand), Japan (including Formosa and other islands adjacent to Japan), and the Union of South Africa of all species and varieties of citrus fruits, on account of citrus canker, except that oranges of the mandarin class (including satsuma and tangerine varieties) may be imported on compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

Sweet potato and yam.—Quarantine No. 29: Prohibits the importation for any purpose of any variety of sweet potatoes or yams (*Ipomoea batatas* and *Dioscorea* spp.) from all foreign countries and localities, on account of the

sweet potato weevils (*Cylas* spp.) and the sweet potato scarabee (*Euscepes batatae*).

Banana plants.—Quarantine No. 31: Prohibits the importation for any purpose of any species or variety of banana plants (*Musa* spp.), or portions thereof, from all foreign countries and localities, on account of the banana root borer (*Cosmopolites sordidus*).

Bamboo.—Quarantine No. 34: Prohibits the importation for any purpose of any variety of bamboo seed, plants, or cuttings thereof capable of propagation, including all genera and species of the tribe *Bambuseae*, from all foreign countries and localities, on account of dangerous plant diseases, including the bamboo smut (*Ustilago shiraiana*). This quarantine order does not apply to bamboo timber consisting of the mature dried culms or canes which are imported for fishing rods, furniture making, or other purposes, or to any kind of article manufactured from bamboo, or to bamboo shoots cooked or otherwise preserved.

Nursery stock, plants, and seeds.—Quarantine No. 37, as amended, with regulations (effective on and after June 1, 1919); Prohibits the importation of nursery stock and other plants and seeds from all foreign countries and localities on account of certain injurious insects and fungous diseases, except as provided in the regulations. Under this quarantine the following plants and plant products may be imported without restriction: Fruits, vegetables, cereals, and other plant products imported for medicinal, food, or manufacturing purposes, and field, vegetable, and flower seeds. The entry of the following plants for propagation is permitted under restriction: Lily bulbs, lily of the valley, narcissus, hyacinths, tulips, and crocus; stocks, cuttings, scions, and buds of fruits; rose stocks, including manetti, multiflora, brier rose, and rosa rugosa; nuts, including palm seeds; seeds of fruit, forest, ornamental, and shade trees; seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants.

OTHER RESTRICTIVE ORDERS.

The regulation of the entry of nursery stock from foreign countries into the United States was specifically provided for in the plant-quarantine act. The act further provides for the similar regulation of any other class of plants or plant products when the need therefor shall be determined. The entry of the plants and plant products listed below has been brought under such regulation:

Nursery stock.—Nursery stock is entered under regulations requiring a permit, foreign certification and marking, reporting arrival and distribution, and inspection at destination. The term "nursery stock" includes all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees or shrubs, and other plants and plant products for propagation, except field, vegetable, and flower seeds, bedding plants, and other herbaceous plants, bulbs, and roots. (These regulations will remain in force until June 1, 1919. See Quarantine No. 37.)

Irish potatoes.—The importation of Irish potatoes is prohibited altogether from the countries enumerated in the potato quarantine. Potatoes may be admitted from other foreign countries in accordance with the order of December 22, 1913, bringing the entry of potatoes under restriction on account of injurious potato diseases and insect pests. The following countries have qualified for the importation of potatoes under the regulations issued under said order: Denmark, Holland, Belgium, Cuba, Bermuda, and the Dominion of Canada. The regulations issued under this order have been amended so as to permit, free of any restrictions whatsoever under the plant quarantine act, the importation of potatoes from any foreign country into the Territories of Porto Rico and Hawaii for local use only and from the Dominion of Canada and Bermuda into the United States or any of its Territories or Districts.

Avocado, or alligator pear.—The order of February 27, 1914, prohibits the importation from Mexico and the countries of Central America of the fruits of the avocado, or alligator pear, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of the avocado weevil. Entry is permitted only through the port of New York and is limited to the large, thick-skinned variety of the avocado. The importation of the small, purple, thin-skinned variety of the fruit of the avocado and of avocado nursery stock under 18 months of age is prohibited.

Cotton.—The order of April 27, 1915, prohibits the importation of cotton from all foreign countries and localities, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of injurious insects, including the pink bollworm. These regulations apply in part

to cotton grown in and imported from the Imperial Valley, in the State of Lower California, in Mexico.

Corn.—The order of March 1, 1917 (Amendment No. 1, with Regulations, to Notice of Quarantine No. 24), prohibits the importation of Indian corn or maize in the raw or unmanufactured state from the countries and localities listed in Notice of Quarantine No. 24, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of injurious diseases of Indian corn.

Cottonseed products.—The order of June 23, 1917, prohibits the importation of cottonseed cake, meal, and all other cottonseed products, except oil, from all foreign countries, and a second order of June 23, 1917, prohibits the importation of cottonseed oil from Mexico except under permit and in accordance with the other provisions of the regulations issued under said orders, on account of injurious insects, including the pink bollworm.

Citrus fruits.—The order of June 27, 1917 (Notice of Quarantine No. 28, with Regulations), prohibits the importation from the countries and localities listed therein of all species and varieties of citrus fruits, excepting only oranges of the mandarin class (including satsuma and tangerine varieties), on account of the citrus-canker disease. Oranges of the mandarin class (including satsuma and tangerine varieties) may be imported under permit and in accordance with the other provisions of the regulations issued under said order.

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